

3/5/99

K 98 4623

## SUMMARY OF SAFETY AND EFFECTIVENESS

**Sponsor:** Biomet, Inc.  
Airport Industrial Park  
Warsaw, Indiana 46580

**Device:** Maxim Removable Molded Poly Tibia

**Classification Name:** Knee joint patellofemorotibial polymer/metal/polymer semi-constrained cemented prosthesis

**Intended Use:** Indications for use of knee joint replacement prostheses include: 1) painful and disabled knee joint resulting from osteoarthritis, rheumatoid arthritis, or traumatic arthritis where one or more compartments are involved, 2) failure of a previous joint replacement procedure, 3) correction of varus, valgus, or post traumatic deformity, and 4) correction or revision of unsuccessful osteotomy or arthrodesis. The device is a single use implant.

**Device Description:** The Maxim Removable Molded Poly Tibia is intended to replace the tibial articulating surface in a total joint replacement with Maxim femoral components cleared in 510(k) K915132. This device is a CoCr tibial plate with a removable molded UHMWPE tibial bearing that can be used with previously cleared modular Maxim tibial bearings.

**Potential Risks:** The potential risks associated with this device are the same as with any joint replacement device. These include, but are not limited to:

Reaction to bone cement	Bone fracture
Fracture of the components	Hematoma
Cardiovascular disorders	Blood vessel damage
Implant loosening/migration	Nerve damage
Soft tissue imbalance	Excessive wear
Deformity of the joint	Infection
Delayed wound healing	Metal sensitivity
Fracture of the cement	Dislocation

**Substantial Equivalence:** In function and overall design the Maxim Removable Molded Poly Tibia Prosthesis is equivalent to other commercially available tibial components currently on the market.



Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

MAR - 5 1999

Mr. Fred McClure  
Regulatory Specialist  
Biomet®, Inc.  
P.O. Box 587  
Warsaw, Indiana 46581-0587

Re: K984623  
Maxim Removable Molded Poly Tibia  
Regulatory Class: II  
Product Code: JWH  
Dated: February 16, 1999  
Received: February 17, 1999

Dear Mr. McClure:

We have reviewed your Section 510(k) notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). This decision is based on this device being equivalent only to similar devices labeled and intended to be fixed within bone with acrylic "bone cement." You may, therefore, market your device subject to the general controls provisions of the Act and the following limitations:

1. The thinnest tibial insert available is the nominal "12mm" sized insert, which has a minimum polyethylene thickness under the condyles of 6.6 mm.
2. This device may not be labeled or promoted for non-cemented use.
3. All labeling for this device, including package label and labeling included within the package, must prominently state that the device is intended for cemented use only.

4. Any non-cemented fixation of this device is considered investigational and may only be investigated as a significant risk device in accordance with the investigational device exemption (IDE) regulation under 21 CFR, Part 812. All users of the device for non-cemented fixation must receive approval from their respective institutional review boards (IRBs) and the Food and Drug Administration (FDA) to conduct the investigation.

The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practices, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (Premarket Approval), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 895. A substantially equivalent determination assumes compliance with the current Good Manufacturing Practice requirement, as set forth in the Quality System Regulation (QS) for Medical Devices: General regulation (21 CFR Part 820) and that, through periodic (QS) inspections, the Food and Drug Administration (FDA) will verify such assumptions. Failure to comply with the GMP regulation may result in regulatory action. In addition, FDA may publish further announcements concerning your device in the Federal Register. Please note: this response to your premarket notification submission does not affect any obligation you might have under sections 531 through 542 of the Act for devices under the Electronic Product Radiation Control provisions, or other Federal Laws or Regulations.

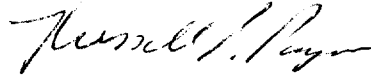
This letter will allow you to begin marketing your device as described in your 510(k) premarket notification immediately. An FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4659. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR 807.97). Other general information on your responsibilities under the Act may be

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obtained from the Division of Small Manufacturers Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address "<http://www.fda.gov/cdrh/dsmamain.html>".

Sincerely yours,



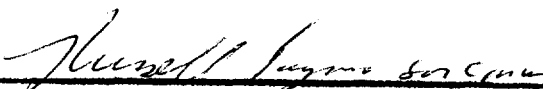
*for* Celia M. Witten, Ph.D., M.D.  
Director  
Division of General and  
Restorative Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

510 (k) Number (if known) : 1984623

Device Name: Maxim Removable Molded Poly Tibia

**Indications For Use:** Indications for use of knee joint replacement prostheses include: 1) painful and disabled knee joint resulting from osteoarthritis, rheumatoid arthritis, or traumatic arthritis where one or more compartments are involved, 2) failure of a previous joint replacement procedure, 3) correction of varus, valgus, or post traumatic deformity, and 4) correction or revision of unsuccessful osteotomy or arthrodesis. The device is a single use implant intended for use with bone cement.

  
(Division Sign-Off)  
Division of General Restorative Devices  
510(k) Number 1984623

Prescription Use X  
(Per 21 CFR 801.109)

(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED)